

REMARKS

Claims 1-19 were pending and considered by the Examiner. Claims 1-19 were rejected. By way of this document, Applicants make no amendments to the claims, but respectfully request the Examiner to consider the following remarks, reconsider the claims and allow all pending claims 1-19.

Response to Claim Rejections Under 35 USC 103

Claims 1-19 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,810,973 (Carlsmith, et al.) in view of U.S. Patent 5,944,952 (Shackford, et al).

Carlsmith, et al. teaches an apparatus for producing small particles from high consistency wood pulp. The disclosed apparatus is a pin mixer having a housing with a substantially smooth interior surface. Relief means is provided for limiting the buildup of high consistency pulp fiber accretions on the pin tips. The relief means is a relief chamber 26 formed in the interior surface of housing 12. A first portion of the interior surface of housing 12 defines a constant distance r_1 from a central axis 27, and extends from a predetermined point B on the interior housing surface 25 clockwise as shown in the drawings, to a predetermined point A. The second interior portion defines a variable distance r_2 from the predetermined A clockwise to the point B. The distance r_2 is greater than r_1 . The relief chamber extends longitudinally the entire length of housing 12 (column 5, lines 40-60). Shackford, et al. discloses a method for bleaching high consistency pulp with a gaseous bleaching reagent. The pulp is shredded and fluffed in the presence of a contacting gas, which includes the bleaching reagent. The pulp is retained in the contactor for a predetermined time sufficient to consume 75% to about 90% of a selected dose of the bleaching reagent sufficient

to delignify high consistency pulp from an initial Kappa number to an intermediate Kappa number. The pulp and gas are separated in a separation chamber. The gas and pulp are then passed in a co-current relationship at different velocities to complete the desired delignification.

In contrast to the teachings of Carlsmith, et al. and Shackford, et al. alone or in combination, claim 1 as originally filed recites a monitoring system that includes

“a sensor . . . configured for sensing a physical parameter associated with said stock preparation apparatus, . . .including a wireless transmitter”.

Claim 1 as filed originally further recites, in contrast to Carlsmith, et al and Shackford, et al., alone or in combination:

“a remote unit including a receiver for receiving said wireless output signal, . . .including a first data link”.

In still further contrast to the teachings of Carlsmith, et al. and Shackford, et al., alone or in combination, claim 1 as filed recites;

“a base unit including a second data link...coupled with said first data link for at least one of:

**analyzing said remote output signal;
transmitting a state notification to said remote unit . . .;
transmitting a price quote to said remote unit . . .; and
transmitting a shipment notification to said remote unit . . .”.**

Carlsmith, et al. discloses a pin mixer configured in such a way as to provide a relief means for limiting build up of fiber on the pin tips. Shackford, et al. discloses a bleaching process. While each discloses a specific apparatus useful in pulp preparation processes, neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches a sensor coupled

with the stock preparation apparatus configured to sense a physical parameter of the apparatus. Neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches a remote unit including a receiver receiving a signal from the sensor and a first data link. Neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches a base unit including a second data link coupled with the remote unit and including means for analyzing the remote signal, transmitting a state notification to the remote unit, transmitting a price quote to the remote unit and/or transmitting a shipment notification to the remote unit, as recited in claim 1. The present invention, as recited in originally filed claim 1, directly determines the state of a wear part in a stock preparation apparatus, transmits signals in regard thereto to a base unit remote from the apparatus and allows remote monitoring of the stock preparation apparatus. The system can then be easily retrofitted on to existing machinery. Data acquisition and analysis occurs seamlessly with out effort by the customer at a remote location, thereby providing improved service to the customer while insuring prompt sales through replacement parts to the manufacturer. Accordingly, Applicants respectfully submit that claim 1 together with claims 2-9 dependent therefrom are allowable over the prior art, and reconsideration and allowance are respectfully requested.

In contrast to the teachings of Carlsmith, et al. and Shackford, et al., alone or in combination, claim 10 as originally filed recites a method of monitoring a stock preparation system that includes:

**“sensing a physical parameter associated with said stock preparation apparatus;
transmitting an airborne wireless output signal...(of the parameter);
receiving the output signal at a remote unit... and”
transmitting a...signal from...said remote unit to...a base unit; and at least one
of:**

**analyzing said remote output signal;
transmitting a state notification . . . ;
transmitting a price quote . . . ; and
transmitting a shipment notification...”**

Carlsmith, et al. discloses a pin mixer configured in such a way as to provide a relief means for limiting build up of fiber on the pin tips. Shackford, et al. discloses a bleaching process. While each discloses a specific apparatus useful in pulp preparation processes, and describes operation thereof, neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches a method of monitoring a stock preparation including sensing a physical parameter of the apparatus and transmitting a wireless signal of the sensed parameter. Neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches receiving the wireless signal at a remote unit and transmitting a signal therefrom to a base unit. Neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches at least one of analyzing the remote signal, transmitting a state notification corresponding to the sensed physical parameter, transmitting a price quote to the remote unit and/or transmitting a shipment notification to the remote unit indicating that a part has been shipped, as recited in claim 10. The present invention, as recited in originally filed claim 10, directly determines the state of a wear part in a stock preparation apparatus, transmits signals in regard thereto to a base unit remote from the apparatus and allows remote monitoring of the stock preparation apparatus. The system can then be easily retrofitted on to existing machinery. Data acquisition and analysis occurs seamlessly with out effort by the customer at a remote location, thereby providing improved service to the customer while insuring prompt sales through replacement parts to the manufacturer. Accordingly, Applicants respectfully submit that claim 10 together with claims

11-16 dependent therefrom are allowable over the prior art, and reconsideration and allowance are respectfully requested.

In contrast to the teachings of Carlsmith, et al. and Shackford, et al. alone or in combination claim 17 as filed originally recites a method of monitoring a physical parameter wear part in a system for making or processing a fiber suspension which include steps of:

**“sensing a physical parameter associated with the wear part;
transmitting an airborne wireless output signal . . . corresponding to said
sensed physical parameter;
receiving said wireless output signal at a receiver of a remote unit;”
transmitting a...signal from...said remote unit to...a base unit; and
at least one of:
analyzing said remote output signal;
transmitting a state notification . . .;
transmitting a price quote . . .; and
transmitting a shipment notification...”**

Carlsmith, et al. discloses a pin mixer configured in such a way as to provide a relief means for limiting build up of fiber on the pin tips. Shackford, et al. discloses a bleaching process. While each discloses a specific apparatus useful in pulp preparation processes, and describes operation thereof, neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches a method of monitoring a stock preparation including sensing a physical parameter of the apparatus and transmitting a wireless signal of the sensed parameter. Neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches receiving the wireless signal at a remote unit and transmitting a signal therefrom to a base unit. Neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches at least one of analyzing the remote signal, transmitting a state notification corresponding to the sensed physical parameter,

transmitting a price quote to the remote unit and/or transmitting a shipment notification to the remote unit indicating that a part has been shipped, as recited in claim 17. The present invention, as recited in originally filed claim 17, directly determines the state of a wear part in a stock preparation apparatus, transmits signals in regard thereto to a base unit remote from the apparatus and allows remote monitoring of the stock preparation apparatus. The system can then be easily retrofitted on to existing machinery. Data acquisition and analysis occurs seamlessly with out effort by the customer at a remote location, thereby providing improved service to the customer while insuring prompt sales through replacement parts to the manufacturer. Accordingly, Applicants respectfully submit that claim 17 together with claim 18 dependent therefrom are allowable over the prior art, and reconsideration and allowance are respectfully requested.

In contrast to the teachings of Carlsmith, et al. and Shackford, et al. alone or in combination claim 19 as filed originally recites a stock preparation monitoring system that includes

“...a sensor . . . configured for sensing a physical parameter associated with said stock preparation apparatus, . . .including a transmitter...;
a remote unit including a receiver for receiving said wireless output signal,
...(and) ... a first data link...;
a base unit including a second data link...coupled with said first data link for at least one of:
analyzing said remote output signal;
transmitting a state notification to said remote unit . . .;
transmitting a price quote to said remote unit . . .; and
transmitting a shipment notification to said remote unit . . .”.

Carlsmith, et al. discloses a pin mixer configured in such a way as to provide a relief means for limiting build up of fiber on the pin tips. Shackford, et al. discloses a bleaching process. While each discloses a specific apparatus useful in pulp preparation processes, neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches a stock preparation monitoring system that includes a sensor configured to sense a physical parameter of the apparatus. Neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches a remote unit including a receiver receiving a signal from the sensor and a first data link. Neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches a base unit including a second data link coupled with the remote unit and including means for analyzing the remote signal, transmitting a state notification to the remote unit, transmitting a price quote to the remote unit and/or transmitting a shipment notification to the remote unit, as recited in claim 19. The present invention, as recited in originally filed claim 19, directly determines the state of a wear part in a stock preparation apparatus, transmits signals in regard thereto to a base unit remote from the apparatus and allows remote monitoring of the stock preparation apparatus. The system can then be easily retrofitted on to existing machinery. Data acquisition and analysis occurs seamlessly with out effort by the customer at a remote location, thereby providing improved service to the customer while insuring prompt sales through replacement parts to the manufacturer. Accordingly, Applicants respectfully submit that claim 19 is allowable over the prior art, and reconsideration and allowance are respectfully requested.

Response to Claim Rejections Under 35 USC 112

Claims 1-19 have been rejected under 35 U.S.C. 112 2nd paragraph as being indefinite for failing to distinctly claim the invention. The Examiner states, “More precision is necessary to explicitly state in the claims applicant’s conception to permit resolution of the disclosure vis a vis the existing art.”

It is not clear to Applicants in what way the independent claims of the present application are indefinite, and Applicants respectfully submit that the claims are not indefinite.

Claim 1 clearly recites a monitoring system which includes a stock preparation apparatus, a sensor coupled to the apparatus, a remote unit including a receiver receiving a wireless output signal from the sensor and a base unit in communication with the remote unit. The sensor is clearly described in the specification beginning on page 4, line 17. The remote unit is clearly described in the specification beginning on page 5, line 14. The base unit is clearly defined in the specification beginning on page 6, line 10. Claim 1 goes on to describe functions of the base unit which include at least one of analyzing the signal received from the remote unit, transmitting a state notification back to the remote unit, transmitting a price quote to the remote unit and/or transmitting a shipment notification to the remote unit. Operation of the invention is clearly described in the specification beginning at page 7, line 11. Since claim 1 recites elements clearly described in the specification, and further interrelates the various recited elements, it is not seen in what way claim 1 fails to particularly point out and distinctly claim the subject matter of the invention.

Claim 10 recites a method of monitoring a stock preparation apparatus which includes steps of coupling a sensor to the apparatus, sensing a physical parameter of the apparatus,

transmitting a signal corresponding to the parameter, receiving the signal at a remote unit, and transmitting a remote output signal to a base unit. Claim 10 further recites that the method includes at least one of analyzing the signal, transmitting a state notification via first and second data links, transmitting a price quote via first and second data links and/or transmitting a shipment notification via first and second data links. Again, it is respectfully submitted that claim 10 clearly recites interrelated steps of a method, each step of which is described clearly in the specification, as indicated above with respect to the monitoring system of claim 1.

Within the body of claim 11, the recited steps are interrelated with sufficient specificity so that it is clear how the method operates. Applicants respectfully submit that claim 10 therefore particularly points out and distinctly claims the invention.

With respect to claim 17, a method of monitoring a physical parameter of a wear part in a stock preparation apparatus is recited, which includes the distinct and interrelated steps of positioning a sensor in association with the wear part, sensing the parameter, transmitting an airborne wireless output signal indicative thereof, receiving the output signal at a remote unit and transmitting the signal to a base unit. Claim 17 thereafter recites at least one of analyzing the signal, transmitting a state notification, transmitting a price quote and/or transmitting a shipment notification from the base unit. Again, Applicants respectfully submit that claim 17 particularly points out and distinctly claims the subject matter of the invention. Each step of the method is a step clearly described in the specification, as described above, and within claim 17 the various steps are recited in a manner pointing out the interrelationship thereof.

Claim 19 recites a stock preparation monitoring system that includes a sensor, a remote unit and a base unit as described above with respect to claim 1. The base unit is recited to include means for analyzing the signal, transmitting a state notification, transmitting

a price quote and/or transmitting a shipment notification as described above with respect to claim 1. Applicants respectfully submit that claim 19 therefore particularly points out and distinctly claims the invention.

For these reasons, Applicants respectfully submit that claim 1 together with dependent claims 2-9, claim 10 together with dependent claims 11-16, claim 17 together with dependent claim 18 and claim 19 do in fact particular point out and distinctly claim the invention. Therefore reconsideration and removal of the rejection under 35 U.S.C. 112 are respectfully requested.

Response to Double Patenting Rejection

Claim 1-19 have been rejected under the judicially created doctrine of double patenting over claims 1-37 of U.S. Patent 6,267,847 (Doelle, et al.).

Doelle, et al. teaches a pulper for a stock preparation system. Pulper 12 includes a housing or drum 24, a plurality of stationary pulping foils 26, a rotatable shaft assembly 28 and a valve 30. Housing 24 includes a fiber inlet 32, water inlets 34 and an outlet 36, and defines an inner chamber 38. Stationary pulping foils 26 are spaced at predetermined intervals along a length of housing 24 (column 3, lines 13-24). Shaft assembly 28 includes a shaft 46, an auger 48 and a plurality of movable pulping foils 50 (column 3, lines 46-47). Auger 48 is positioned relative to fiber inlet 32 to receive the input source of fiber (column 3, lines 54-56). Moveable pulping foils 50 are carried by and extend from shaft 46. Valve 30 is positioned in association with outlet 36 and is selectively moveable toward and away from open end 42 of housing 24. Valve 30 is configured as a conical valve (column 4, lines 21-23).

The claims of the present invention recite a monitoring system (claims 1-9), a method of monitoring a stock preparation system (claims 10-16), a method of monitoring a wear part (claims 17-18) and a stock preparation monitoring system (claim 19), each as described above with respect to the prior art rejection. The apparatus claims of the present invention (claims 1 and 19) recite a sensor including a transmitter, a remote unit including a receiver and a first data link, and a base unit that includes a second data link. Each recites a means for at least one of analyzing the remote signal, transmitting a state notification, transmitting a price quote and/or transmitting a shipment notification. The method claims of the present invention (claims 10 and 17) recite steps that include sensing a physical parameter, transmitting an airborne wireless signal corresponding to the parameter, receiving the wireless signal at a remote unit and transmitting a signal to a base unit, and at least one of analyzing the remote signal, transmitting a state notification, transmitting a price quote and/or transmitting a shipment notification. It is respectfully submitted that none of these elements recited in the present apparatus claims and none these steps recited in the present method claims are taught by Doelle, et al. The present invention is neither described nor shown in Doelle, et al. and such is not and could not have been claimed in Doelle, et al. Therefore, Applicants respectfully submit that the double patenting rejection based on claims 1-37 of Doelle, et al. is improper and should be removed. Reconsideration of the double patenting rejection and removal thereof are respectfully requested.

Conclusion

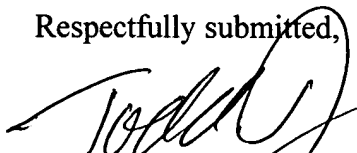
For the foregoing reasons, Applicants submit that the pending, original claims are definite and do particularly point out and distinctly claim the subject matter which Applicants

regard as the invention. Moreover, Applicants submit that no combination of the cited references teaches, discloses or suggests the subject matter of the original claims. The pending claims are therefore in condition for allowance, and Applicants respectfully request withdrawal of all rejections and allowance of the claims.

In the event Applicants have overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby conditionally petition therefor and authorizes that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

Should any question concerning any of the foregoing arise, the Examiner is invited to telephone the undersigned at (260) 897-3400.

Respectfully submitted,



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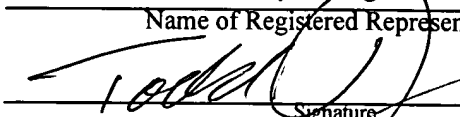
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December 30, 2003

Date